IN THE TITLE:

Please amend the title as --MATRIX SUBSTRATE AND DISPLAY WHICH INPUTS SIGNAL-POLARITY INVERTING SIGNALS TO PICTURE DATA--.

IN THE CLAIMS:

Please cancel Claims 6 and 23.

Please amend Claims 1, 5, 18 and 22 as follows:

1. (Amended) A matrix substrate having plural switching elements provided in matrix corresponding to intersecting points of scanning lines and signal lines, plural picture element electrodes connected to the switching elements, and horizontal circuits and vertical circuits for inputting the signals to the switching elements, [wherein] the matrix substrate [comprises] comprising:

a horizontal scanning circuit for sampling a picture data based on digital picture signals[,];

a latch circuit for memorizing the data synchronously with output from the horizontal scanning circuit[,];

a D/A converter for converting the output from the

latch circuit into analog signals[,];

plural signal transfer switches provided between the D/A converter and the signal lines[, and];

a selection circuit for selecting at least one of the signal transfer switches; and

means for inputting signal-polarity inverting signals together with the picture data, and for inverting the polarity of the analog output of the D/A converter.

Claim 5, line 2, delete "constituted of".

18. (Amended) A liquid crystal device comprising a matrix substrate having plural switching elements provided in matrix corresponding to intersecting points of scanning lines and signal lines, plural picture element electrodes connected to the switching elements, and horizontal circuits and vertical circuits for inputting the signals to the switching elements; a counter substrate opposing to the matrix substrate; and a liquid crystal material placed between the matrix substrate and the counter substrate, [wherein] the matrix substrate [comprises] comprising:

a horizontal scanning circuit for sampling a picture data based on digital picture signals[,];

a latch circuit for memorizing the data

synchronously with output from the horizontal scanning circuit[,];

a D/A converter for converting the output from the latch circuit into analog signals[,];

plural signal transfer switches connected to output of the D/A converter[, and];

a selection circuit for selecting at least one of the signal transfer switches; and

means for inputting signal-polarity inverting signals together with the picture data, and for inverting the polarity of the analog output of the D/A converter.

Claim 22, lines 2-3, delete "constituted of".

Please add new claims 38-48 as follows:

--38. A matrix substrate having plural switching elements provided in matrix corresponding to intersecting points of scanning lines and signal lines, plural picture element electrodes connected to the switching elements, a horizontal circuit for inputting the signals to the switching elements, and a vertical circuit for driving said scanning lines, the matrix substrate comprising:

a horizontal scanning circuit for sampling a

picture data based on digital picture signals;

a latch circuit for memorizing the data synchronously with output from the horizontal scanning circuit;

a D/A converter for converting the output from the latch circuit into analog signals; and

polarity inversion means for inputting, together with the picture data, a signal polarity inversion signal and for inverting a polarity of the analog output of said D/A converter according to the signal polarity inversion signal.

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39. The matrix substrate according to claim 38, wherein the switching element is a CMOS transistor.

40. The matrix substrate according to claim 38, wherein the D/A converter is capable of inputting one bit more than the bit number of the picture data bits, and the signal-polarity inverting signal is inputted to the most significant bit of the D/A converter.

41. The matrix substrate according to claim 38, wherein the matrix substrate has a booster circuit for boosting the output of the D/A converter.

42. The matrix substrate according to claim 41, wherein the booster circuit comprises a clamp type amplifier.

43. A liquid crystal apparatus, comprising:

a matrix substrate having plural switching elements provided in matrix corresponding to intersecting points of scanning lines and signal lines, plural picture element electrodes connected to the switching elements, a horizontal circuit for inputting the signals to the switching elements, and a vertical circuit for driving the signal lines;

an opposite substrate opposing said matrix substrate; and

a liquid crystal material between said matrix substrate and said opposite substrate,

said apparatus further comprising a horizontal scanning circuit for sampling a picture data based on digital picture signals, a latch circuit for memorizing the data synchronously with output from the horizontal scanning circuit, a D/A converter for converting the output from the latch circuit into analog signals, and means for inputting a signal polarity inversion signal together with the picture data, and for inverting a polarity of the analog output of said D/A converter according to the signal polarity inversion signal.